

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

- 1 1. (Currently Amended) ~~An A-waterproof recreational~~ audio device for providing musical
2 signals to a user, comprising:
 - 3 a) at least one transducer, such that said transducer enables music to be heard by said
4 user via transcutaneous bone conduction;
 - 5 b) a means for said at least one transducer to be in vibratory contact with the head of
6 said user; and
 - 7 c) means for waterproofing said at least one transducer.

- 1 2. (Currently Amended) The ~~waterproof recreational~~ audio device according to claim 1,
2 wherein said at least one transducer includes a plurality of transducers.

- 1 3. (Currently Amended) The ~~waterproof recreational~~ audio device according to claim 1,
2 wherein said plurality of transducers is arranged in an array.

- 1 4. (Currently Amended) The ~~waterproof recreational~~ audio device according to claim 2,
2 wherein the musical frequency range is split into three frequency channels.

- 1 5. (Currently Amended) The ~~waterproof recreational~~ audio device according to claim 4,
2 wherein said three frequency channels consist of:
 - 3 a) a low frequency range,
 - 4 b) a mid frequency range, and
 - 5 c) high frequency range.

- 1 6. (Currently Amended) The ~~waterproof recreational~~ audio device according to claim 3,
2 wherein at least one of said transducers in said array is an ultrasonic transducer.

- 1 7. (Currently Amended) The ~~waterproof recreational~~ audio device according to claim 3,
2 wherein at least one of said transducers in said array is a vibrotactile transducer.
- 1 8. (Currently Amended) The ~~waterproof recreational~~ audio device according to claim 1,
2 ~~wherein said audio device includes at least~~ further including at least one amplifier.
- 1 9. (Currently Amended) The ~~waterproof recreational~~ audio device according to claim 1,
2 wherein at least one of said transducers is positionable at the front of the head of said
3 user.
- 1 10. (Currently Amended) The ~~waterproof recreational~~ audio device according to claim 1,
2 wherein at least one of said transducers in said array is positionable at the back of the
3 head of said user.
- 1 11. (Currently Amended) The ~~waterproof recreational~~ audio device according to claim 1,
2 wherein said transducer is associated with a band that encircles the head of a user.
- 1 12. (Currently Amended) The ~~waterproof recreational~~ audio device according to claim 1,
2 wherein said transducer is associated with a hat that is worn on the head of the said user.
- 1 13. (Currently Amended) The ~~waterproof recreational~~ audio device according to claim 1,
2 wherein said transducer is associated with a helmet that is worn on the head of said user.
- 1 14. (Currently Amended) The ~~waterproof recreational~~ audio device according to claim 1,
2 wherein said transducer is associated with a band of recreational eye wear selected from
3 the group consisting of swim goggles, ski goggles, snorkel mask, and sun glasses.
- 1 15. (Currently Amended) The ~~waterproof recreational~~ audio according to claim 5, wherein
2 said low frequency range volume is adjustable.
- 1 16. (Currently Amended) The ~~waterproof recreational~~ audio device according to claim 5,
2 wherein said mid frequency range volume is adjustable.

- 3 17. (Currently Amended) The ~~waterproof recreational~~ audio device according to claim 5,
4 wherein said high frequency range volume is adjustable.
- 1 18. (Currently Amended) The ~~waterproof recreational~~ audio device according to claim 1,
2 wherein said mid frequency range has a fixed maximum signal level of 90 dBa for 8
3 hours.
- 1 19. (Currently Amended) The ~~waterproof recreational~~ audio device of claim 1, wherein said
2 waterproof recreational audio device transmits a musical signal of a high fidelity
3 frequency response across a broad frequency range where there is:
4 a) a low frequency response is in the range of 40-1000 Hz;
5 b) a mid frequency response is in the range of 250-6000 Hz[.,,]; and
6 c) a high frequency response is in the range of 5000-20,000 Hz.
- 1 20. (Currently Amended) The ~~waterproof recreational~~ audio device of claim 19, wherein said
2 at least one transducer includes an ultrasonic transducer
- 1 21. (Currently Amended) The ~~waterproof recreational~~ audio device of claim 19, wherein said
2 at least one transducer includes a vibrotactile transducer.
- 1 22. (Currently Amended) The ~~waterproof recreational~~ audio device of claim 19, wherein said
2 waterproof recreational audio device includes an adjusting capability for the mid range
3 frequency response, such that:
4 a) said mid frequency range volume can be adjusted to allow environmental noise to
5 be heard by the user[.,,];
6 b) said mid frequency range has a fixed minimum level to minimize nuisance noise
7 for individuals near said waterproof recreational device[.,,]; and
8 c) said mid range has a fixed maximum level to restrict harmful dB noise levels for
9 user.
- 1 23. (Currently Amended) The ~~waterproof recreational~~ audio device of claim 19, wherein a
2 volume of said low frequency range is adjustable.

- 1 24. (Currently Amended) The ~~waterproof recreational~~ audio device of claim 19, wherein a
2 volume of said mid frequency range is adjustable.
- 1 25. (Currently Amended) The ~~waterproof recreational~~ audio device of claim 19, wherein a
2 volume of said high frequency is adjustable.
- 1 26. (Currently Amended) The ~~waterproof recreational~~ audio device of claim 19, wherein said
2 mid frequency range has a fixed maximum signal level of 90 dBa for 8 hours.
- 1 27. (Currently Amended) The ~~waterproof recreational~~ audio device of claim 1 further
2 comprising a sound source in communication with said at least one transducer, said sound
3 source generating a music signal which is received by said at least one transducer.
- 1 28. (Currently Amended) The ~~waterproof recreation~~ audio device of claim 27 wherein said
2 communication between said sound source and said at least one transducer is via a wired
3 connection.
- 1 29. (Currently Amended) The ~~waterproof recreation~~ audio device of claim 27 wherein said
2 communication between said sound source and said at least one transducer is via a
3 wireless connection.
- 1 30. (Currently Amended) The ~~waterproof recreation~~ audio video of claim 27 wherein said
2 sound source is affixed to said means for said at least one transducer to be in contact with
3 the head of said user.
- 1 31. (Currently Amended) The ~~waterproof recreation~~ audio device of claim 27 wherein said
2 sound source is selected from the group consisting of MP3 player, tape player, radio,
3 audio transceiver, and disc player.
- 1 32. (Currently Amended) A recreational audio device, comprising :
2 a) at least one transducer which enables music to be heard by a user via
3 transcutaneous bone conduction; and

4 b) a support which supports said at least one transducer in contact with a head of a
5 user at a plurality of locations around the head of said user.

1 33. (Original) The recreational audio device according to claim 32 wherein said at least one
2 transducer includes a plurality of transducers.

1 34. (Original) The recreational audio device according to claim 32 wherein said at least one
2 transducer can be removed from said support and re-positioned at least one different
3 location on said support.

1 35. (Original) The recreational audio device according to claim 32 wherein said at least one
2 transducer can slide to different locations on said support.

1 36. (Original) The recreational audio device according to claim 32 wherein said support can
2 be oriented at multiple orientations relative to a head of a user.

1 37. (Original) The recreational audio device of claim 36 wherein said support is a head band.

1 38. (Original) The recreational audio device of claim 32 further comprising waterproofing for
2 said at least one transducer.

1 39. (Original) The recreational audio device of claim 32 further comprising a sound source
2 for conveying musical signals to said at least one transducer.

1 40. (Currently Amended) A method for a user to listen to music via transcutaneous bone
2 conduction, comprising the steps of:

- 3 a) supplying musical signals from a source to at least one transducer capable of
4 transcutaneous bone conduction;
5 b) contacting a user's head with said at least one transducer; and
6 c) transmitting by transcutaneous bone conduction said musical signal to the user.

1 41. (Original) The method recited in claim 40, further comprising a step of tuning musical
2 sound heard by a user.

- 3 42. (Original) The method of claim 41 wherein said step of tuning comprises changing point
4 of contact of at least one transducer on a user's head.
- 1 43. (Original) The method of claim 42 wherein changing is accomplished by repositioning a
2 support which supports said at least one transducer on said user's head.
- 1 44. (Original) The method of claim 42 wherein changing is accomplished by repositioning
2 said at least one transducer on a support which supports said at least one transducer.
- 1 45. (Original) The method of claim 42 wherein changing is accomplished by sliding said at
2 least one transducer to a different location on a support which supports said at least one
3 transducer.
- 1 46. (Original) The method of claim 40 comprising adjusting volume of at least one a high,
2 mid, or low frequency transmitted via transcutaneous bone conduction via said at least
3 one transducer.
- 1 47. (Original) The method of claim 40 further comprising limiting a mid frequency range has
2 a fixed maximum signal level of 90 dBa for 8 hours.